

# **ABSTRACT**

A polyphase filter for wireless communication systems includes at least two phase splitting filters each having a variable resistance across their respective outputs. The variable resistance can take any suitable form, such as a MOS transistor biased in the linear (triode) region, a bipolar differential pair, or a  
5 digitally switchable resistance. The phase adjustment required for a particular filter can be identified and adjusted through either a closed loop system or an open loop system. Adjustment of the variable resistance reduces quadrature error.